

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

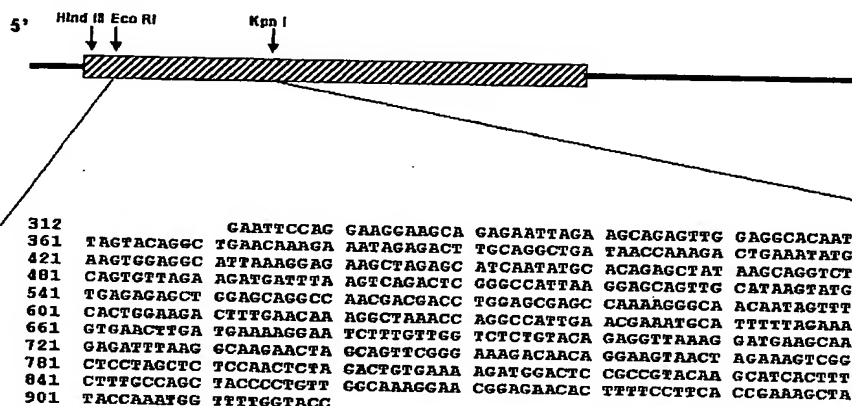
(19) World Intellectual Property
Organization
International Bureau(43) International Publication Date
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number
WO 2004/053052 A2

- (51) International Patent Classification⁷: C12N
- (21) International Application Number: PCT/BR2003/000189
- (22) International Filing Date: 8 December 2003 (08.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
PI0205000-5 9 December 2002 (09.12.2002) BR
PROVISIONAL 012478
5 December 2003 (05.12.2003) BR
- (71) Applicant and
(72) Inventor: CAMARGO, Antônio [BR/BR]; 55 Mario Fer-
raz St., RM 11, Jardim Europa, 01453-010 São Paulo (BR).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): HAYASHI, Mirian
[BR/BR]; 159 Alameda Fernão Cardim, RM 101, Jardins,
01403-020 São Paulo (BR). PORTARO, Fernanda
[BR/BR]; 91 Paulo Ribeiro da Luz St., 05599-140 São
Paulo (BR). GUERREIRO, Juliano [BR/BR]; 67 Paulina
Gobeth Camargo, Cecap II, 13421-470 Piracicaba (BR).
- (74) Agent: LLC INFO CONNECTION LTDA.; 5555 Dom
Hélder Câmara Av., RM 312, Pílares, 20771-001 Rio de
Janeiro (BR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR,
CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished
upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR THE DETERMINATION OF THE PRIMARY STRUCTURE OF THE MESSENGER RNA CODING FOR THE HUMAN RECOMBINANT ENDOOLIGOPEPTIDASE A (HEOPA) [AF217798]...



(57) Abstract: This invention refers to the recombinant human endooligopeptidase (hEOPA), polynucleotide which codes for the hEOPA, polynucleotide which allow the expression of the EOPA in prokaryotes and eukaryotes, including the human beings; use of the synthetic substrates for the determination of the proteolytic activity of the hEOPA, or of its chaperon activity or its activity as soluble peptide receptor; obtaining and using of the specific antibodies and inhibitors of its oligopeptide binding activity, as agonists, competitors and antagonists, which are able to disturb its interaction and the complex formation with other proteins. The invention also refers to the application of the natural and recombinant protein, chemically or genetically modified which aim is the diagnosis and/or the application in congenital, infectious and degenerative pathologic conditions of the central nervous system, and for psychiatric and behavioral dysfunctions. It is also proposed the application of the inhibitors and competitors for the interaction of EOPA with ligands, including antibodies or their derivatives, for the treatment of tissular and neurodegenerative pathologies.